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TREATY ON INTERNATIONAL COOPERATION IN THE AREA OF PATENTS

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(Article 36 and Rule 70 of the PCT)

Applicant's or Agent's File	Ref. FOR FURTHER ACTION	See Notification of Transmittal of the International					
41 474.:sev	. International Filing Date (Month/Da	Preliminary Examination Report (Form PCT/IPEA/416). ay/Year) Priority Date (Month/Day/Year)					
International Application No PCT/EP03/14233	December 15, 2003	December 20, 2002					
International Patent Classification (IPC) or National Classification and IPC B23D15/08							
Applicant Applicant							
SMS DEMAG AKTIENGESELLSCHAFT et al.							
This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.							
2. This REPORT consists	of a total of 5 pages, including this cover s	sheet.					
☑ This report is also accompanied by ANNEXES, i.e., pages of the description, claims, and/or drawings which have been amended and are the basis for this report and/or pages containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).							
These annexes consis	t of a total of 5 pages.						
3. This report contains indications relating to the following items:							
Date of submission of the p	etition:	Date of completion of this report:					
July 1, 2004		December 28, 2004					
	of the office assigned to perform the European Patent Office D-80298 Munich Tel: +49 89 2399-0 Tx: 523656 epmu d Fax: +49 89 2399-4465	Authorized Officer: Wimmer, M. Tel: +49 89 2399-7031					



International File No.: PCT/EP03/14233

I.	Bas	sis of the Report		
1.	With regard to the constituent parts of the international application (replacement pages which were submitted to the application office in compliance with a request according to Article 14 are considered "originally filed" in the context of this report and are not attached to the report, because they do not contain any changes (Rules 70.16 and 70.17)):			
	Specification, pages:			
		s, 6-11 5, 5a	as originally filed received on November 24, 2004 with telefa	
	Claims, Nos.:			
	1-9		received on November 24, 2004 with telefax	
	Drawings, Pages:			
	1/7	7-7/7	as originally filed	
	2. With respect to the language , all the constituent parts marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise cited under this item.			
	The constituent parts were available or furnished to this Authority in the following language: which is:			
	the language of a translation furnished for the purpose of international search (under Rule 23.1(b)).			
	□ the language of publication of the international application (under Rule 48.3(b)).			
	□ the language of the translation furnished for the purpose of international preliminary examinatio (under Rule 55.2 and/or Rule 55.3).			
3.	With regard to the nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:			
	 contained in the international application in written form. filed together with the international application in computer-readable form. 			
		☐ furnished subsequently to this Authority in written form.		
		furnished subsequently to this A	uthority in computer-readable form.	
	_	The statement that the subseque	ently furnished written sequence listing does not go hevond the	



disclosure in the international application as filed has been furnished.

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4.	listing has been furnishe	The statement that the information recorded in computer-readable form is identical to the written listing has been furnished. e amendments have resulted in the cancellation of:			
	☐ the description,	pages:			
	□ the claims,	Nos.:			
	□ the drawings,	sheets/figures:			
5.	☐ This report has been prepared as if (some of) the amendments had not been made, since for the specified reasons they are considered by this Authority to go beyond the disclosure as filed (Rule 70.2(c)).				
	(Any replacement shee annexed to this report.)		h amendments must be referred to under item 1 and		
6.	Any additional remarks:				
	Substantiated determination according to Article 35(2) with respect to novelty, inventive				
activity, and commercial viability; documents and declarations in support of this determination.					
1.	Determination				
	Novelty (N)	Yes: No:	Claims 1-9 Claims		
	Inventive Activity (AI):	Yes: No:	Claims 1-9 Claims		
	Commercial Viability (CV):	Yes: No:	Claims 1-9 Claims		
2.	Documents and Declarations	S			

See attached page.



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EXAMINATION REPORT – ATTACHED PAGE

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Re Point V

Substantiated determination with respect to novelty, inventive activity, and commercial viability; documents and declarations in support of this determination.

The following documents are cited:

D1: DE 34 02 567 A (PEDDINGHAUS CARL ULLRICH DR) August 8, 1985 (1985-08-08)

D2: DE 26 58 137 A (ISHIKAWAJIMA HARIMA HEAVY IND) August 11, 1977 (1977-08-11)

D3: US-A-1 986 685 (SODERBERG ANDREW W) January 1, 1935 (1935-01-01)

Document **D1**, which is regarded as the closest prior art, discloses a cut-to-length shear, from which the object of Claim 1 differs in that a special shear design is housed in a column and in that the lower driver rolls have a central bearing.

The object of Claim 1 is thus novel (Article 33(2) PCT).

The objective to be achieved by the present invention can thus be seen as the introduction of the driver forces directly into the shear columns.

The solution to this problem that is proposed in Claim 1 of the present application is based on inventive activity for the following reasons (Article 33(3) PCT):

Although both Document **D2** and Document **D3** disclose the solution of the shear design and its position in the shear column, none of the available prior-art documents suggests the use of driver rolls supported in the center.

Claims 2-9 are dependent on Claim 1 and thus also fulfill the requirements of the PCT



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with respect to novelty and inventive activity.

The invention is also unquestionably commercially viable, because it can be used in the steel industry.